

## SPECIFICATION

Atty Dkt: F-8632

Identifier: Peter KRAUSE, et al.

**Abstract**

The invention relates to a method for the disintegration and tribochemical activation of especially inorganic materials having a crystalline structure, wherein the starting materials are comminuted (disintegrated) to a particle size of less than 1  $\mu\text{m}$  by the effect of impacting pressure fronts at a pulse duration of less than 10  $\mu\text{s}$  and a sequence frequency of more than 8 kHz. A conglomerate of activated mixed crystals is then obtained. Said conglomerate has an increased aptitude for the formation of modified crystals when water is added. The duration of the effect of the impacting pressure fronts continues until the crystal lattice structure of the particles (30) is destroyed. A device for the disintegration and tribochemical activation of said materials is based on rotating disks whereon moulded bodies with aerodynamical profiles are arranged, said moulded bodies being continuously displaced in a transonic speed range and impacting pressure fronts being produced on the outflow surfaces thereof.